

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

2. (currently amended): The inspection method as set forth in claim 16, wherein a said boundary line, in said radiation inspection image, between said low-density region and high-density region is constructed by a straight line and is inclined with respect to said horizontal scanning direction so that it intersects both edges of said radiation inspection image which extend in said vertical scanning direction.

3. (original): The inspection method as set forth in claim 2, wherein said density pattern in said radiation inspection image includes two high-density regions and one low-density region, said regions being arrayed in said horizontal scanning direction in the order of one high-density region, the low density region, and the other high-density region.

4. (canceled).

5. (canceled).

6. (canceled).

7. (currently amended): ;

A method of generating a storable fluorescent inspection sheet, said storable fluorescent inspection sheet on which a radiation inspection image has been stored and recorded, said radiation inspection image having at least one low-density region and at least one high-density region having a contrast difference of at least 1:20 between the low-density and high-density regions, a boundary line between the low-density and high-density regions extending between opposite edges of the storable fluorescent inspection sheet, and

wherein ~~a~~said boundary line, in said radiation inspection image, between said low-density and high-density regions is constructed by a straight line and is inclined with respect to said horizontal scanning direction so that it intersects both edges of said radiation inspection image which extend in said vertical scanning direction, the method comprising:

disposing a radiation shielding member at a position corresponding to said density pattern on a storable fluorescent sheet;

illuminating said storable fluorescent sheet, on which said shielding member has been disposed, with a dose of radiation that corresponds to said contrast difference; and

storing and recording said radiation inspection image in said storable fluorescent sheet, by repeating the disposition of said radiation shielding member and the illumination of said radiation, with respect said storable fluorescent sheet until said density pattern is obtained.

8. (canceled).

9. (previously presented): A method of inspecting influence of stray light which occurs in a radiation image reader equipped with horizontal scanning means for scanning

excitation light on a storable fluorescent sheet, having stored and recorded a radiation image, in a horizontal scanning direction, vertical scanning means for scanning said storable fluorescent sheet in a vertical scanning direction approximately perpendicular to said horizontal scanning direction, and reading means for obtaining an image signal which represents said radiation image by photoelectrically reading said radiation image, stored and recorded in said storable fluorescent sheet, by the horizontal scanning of said excitation light; said inspection method comprising the steps of:

preparing a storable fluorescent inspection sheet that has stored and recorded a radiation inspection image which has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:50 are arrayed in said horizontal scanning direction;

obtaining an image inspection signal representing said radiation inspection image, by photoelectrically reading said radiation inspection image from said storable fluorescent inspection sheet with said reading means; and

detecting whether noise occurs in the form of a line in the vertical scanning direction in the low-density region of an image reproduced from the image inspection signal, and judging that stray light has occurred if the noise occurs and that stray light has not occurred if the noise does not occur, based on the detection of the noise.

10. (canceled).

11. (previously presented): A method of generating a storable fluorescent inspection sheet having stored and recorded a radiation inspection image that has a density pattern in which one or more low-density and high-density regions having a contrast difference of at least 1:20 are arrayed in a horizontal scanning direction comprising:

disposing a radiation shielding member at a position corresponding to said density pattern on a storable fluorescent sheet;

illuminating said storable fluorescent sheet, on which said shielding member has been disposed, with a dose of radiation that corresponds to said contrast difference; and

storing and recording said radiation inspection image in said storable fluorescent sheet, by repeating the disposition of said radiation shielding member and the illumination of said radiation, with respect said storable fluorescent sheet until said density pattern is obtained.

12. (previously presented): A method of inspecting influence of stray light according to claim 2, wherein said radiation inspection image is rectangular in shape, wherein said boundary line is on the diagonal of said rectangular shape.

13. (canceled).

14. (canceled).

15. (canceled).

16. (previously presented): A method of inspecting influence of stray light which occurs in a radiation image reader equipped with horizontal scanning means for scanning

excitation light on a storable fluorescent sheet, having stored and recorded a radiation image, in a horizontal scanning direction, vertical scanning means for scanning said storable fluorescent sheet in a vertical scanning direction approximately perpendicular to said horizontal scanning direction, and reading means for obtaining an image signal which represents said radiation image by photoelectrically reading said radiation image, stored and recorded in said storable fluorescent sheet, by the horizontal scanning of said excitation light; said inspection method comprising the steps of:

preparing a storable fluorescent inspection sheet on which a radiation inspection image has been stored and recorded, said radiation inspection image having at least one low-density region and at least one high-density region having a contrast difference of at least 1:20 between the low-density and high-density regions, a boundary line between the low-density and high-density regions extending between opposite edges of the storable fluorescent inspection sheet;

obtaining an image inspection signal representing said radiation inspection image, by photoelectrically reading said radiation inspection image from said storable fluorescent inspection sheet with said reading means; and

detecting whether noise occurs in the form of a line in the vertical scanning direction in the low-density region of an image reproduced from the image inspection signal, and judging that stray light has occurred if the noise occurs and that stray light has not occurred if the noise does not occur, based on the detection of the noise.

17. (canceled).

18. (canceled).

19. (currently amended): A method of generating a storable fluorescent inspection sheet, wherein said storable fluorescent inspection sheet on which a radiation inspection image has been stored and recorded, said radiation inspection image having at least one low-density region and at least one high-density region having a contrast difference of at least 1:20 between the low-density and high-density regions, a boundary line between the low-density and high-density regions extending between opposite edges of the storable fluorescent inspection sheet, wherein said density pattern in said radiation inspection image includes two high-density regions and one low-density region, said regions being arrayed in said horizontal scanning direction in the order of one high-density region, the low-density region, and the other high-density region, and

wherein a said boundary line, in said radiation inspection image, between said low-density and high-density regions is constructed by a straight line and is inclined with respect to said horizontal scanning direction so that it intersects both edges of said radiation inspection image which extend in said vertical scanning direction, the method comprising:

disposing a radiation shielding member at a position corresponding to said density pattern on a storable fluorescent sheet;

illuminating said storable fluorescent sheet, on which said shielding member has been disposed, with a dose of radiation that corresponds to said contrast difference; and

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storing and recording said radiation inspection image in said storable fluorescent sheet,
by repeating the disposition of said radiation shielding member and the illumination of said
radiation, with respect said storable fluorescent sheet until said density pattern is obtained.